

## UNITED ATES DEPARTMENT OF COMMERCE Patent and Trademark Offic

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APPLICATION NO. FIRST NAMED INVENTOR FILING DATE ATTORNEY DOCKET NO. 09/581,560 07/17/00 BRUCHMANN В 192286USOPCT **EXAMINER** 022850 IM52/0305 OBLON SPIVAK MCCLELLAND MAIER & NEUSTADT ART UNIT PAPER NUMBER FOURTH FLOOR 1755 JEFFERSON DAVIS HIGHWAY ARLINGTON VA 22202 1711 DATE MAILED:

03/05/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

## Office Action Summary

Application No. 09/581,560

Applicant(s)

Bruchmann et al.

Examiner

Rabon Sergent

Group Art Unit 1711



Responsive to communication(s) filed on	·
☐ This action is <b>FINAL</b> .	
Since this application is in condition for allowance except in accordance with the practice under Ex parte Quayle, 1	for formal matters, prosecution as to the merits is closed 935 C.D. 11; 453 O.G. 213.
A shortened statutory period for response to this action is so is longer, from the mailing date of this communication. Failuapplication to become abandoned. (35 U.S.C. § 133). Exter 37 CFR 1.136(a).	ure to respond within the period for response will cause the
Disposition of Claims	
X Claim(s) <u>1-9</u>	is/are pending in the application.
Of the above, claim(s)	is/are withdrawn from consideration.
Claim(s)	is/are allowed.
	is/are rejected.
Claim(s)	is/are objected to.
	are subject to restriction or election requirement.
Application Papers	
☐ See the attached Notice of Draftsperson's Patent Drav	wing Review, PTO-948.
☐ The drawing(s) filed onis/are ob	ejected to by the Examiner.
☐ The proposed drawing correction, filed on	
X The specification is objected to by the Examiner.	
☐ The oath or declaration is objected to by the Examine	r.
Priority under 35 U.S.C. § 119	
Acknowledgement is made of a claim for foreign prior	rity under 35 U.S.C. § 119(a)-(d).
	es of the priority documents have been
received.	
received in Application No. (Series Code/Serial	Number)
$oxed{X}$ received in this national stage application from	the International Bureau (PCT Rule 17.2(a)).
*Certified copies not received:	
Acknowledgement is made of a claim for domestic pr	iority under 35 U.S.C. § 119(e).
Attachment(s)	
☐ Notice of References Cited, PTO-892	
☐ Information Disclosure Statement(s), PTO-1449, Pape	ır No(s)
☐ Interview Summary, PTO-413	2.040
□ Notice of Draftsperson's Patent Drawing Review, PTC	J-340
□ Notice of Informal Patent Application, PTO-152	
SEE DEFICE ACTION O	ON THE FOLLOWING PAGES
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- 1. The instant application has been filed with two sets of claims. The first set contains 11 claims; the second set contains 9 claims and each page of the second set is denoted as being an amended sheet. The second set has been examined in view of the remarks within the preliminary amendment and the application transmittal letter.
- 2. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Firstly, it is unclear with respect to exactly what components are required to be present within the mixture. It is unclear if both Ia and Ib are required to be present. Furthermore, it is presumed that structures IV and V are required to be present. Clarification is required.

Secondly, the definition of  $R^1$  and  $R^2$  is confusing. Within the first line of the definition, there appears to be a word omission after "radicals". Furthermore, it is unclear if applicants are stating that  $R^1$  and  $R^2$  have different definitions within lines 21-30. Also, there is no indication that  $R^1$  and  $R^2$  can both be radical III.

Thirdly, the use of "may" throughout the claims renders them indefinite, since it is unclear if or to what extent the language denoted by "may" is optional.

Fourthly, the second definition of  $R^3$  is confusing, because it is not clear that the pyrrolidone radical or morpholine radical attaches to the  $C_1$ - $C_4$ -alkyl radical. Also, it is unclear if combinations of the  $R^3$  definition may be present within the mixture.

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Fifthly, the reference to claim 1 within line 10 of page 15 is confusing, because the claim is claim 1.

Sixthly, it is unclear if the isocyanurates may be derived from mixtures of the two diisocyanates.

3. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants have failed to provide a basis for the claimed weight percent.

4. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants have referred to diisocyanate (Ic); however, this diisocyanate is not specified in claim 1.

5. Claims 5 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Firstly, it is unclear if mixtures of the alcohols are encompassed. Also, it remains unclear that the pyrrolidone or morpholine radical attaches to the  $C_1$ - $C_4$ -alkyl group of the alcohol.

Secondly, within step i, if only isophorone diisocyanate is used, then it appears that claim 1 does not provide for such a diisocyanate product containing only the isophorone radical. If

only hexamethylene diisocyanate is used, then diisocyanate (Ib) could not result. If mixtures of the diisocyanates are used, then diisocyanate (Ia) could not result.

6. Claim 6 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicants have not provided adequate description with respect to the ISO 3219, Annex B standard.

7. Claim 6 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Since the ISO 3219, Annex B standard has not been clearly described, the claimed viscosities and the means of determining them have not been enabled.

8. Claims 7-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The reference to (I) is not understood. Is only diisocyanate (I) intended to be present as component B?

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9. Claims 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language, "sheetlike manner", renders the claims indefinite, because it is unclear what is meant by the language. Furthermore, the use of the suffix, "-like", so extends the scope of the word that it is rendered indefinite.

10. The disclosure is objected to because of the following informalities: The reference to "claim 1" within line 42 of page 5 is improper and insufficient to define R<sup>3</sup>.

Appropriate correction is required.

11. Claims 1-9 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In view of the issue raised within paragraph 5, regarding the various diisocyanate starting materials, the position is taken that applicants have not provided adequate description with respect to exactly what components are present within the mixture, depending on the starting reactants. Furthermore, diisocyanate (Ic) has not been defined.

12. Claims 1-9 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

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Applicants have failed to provide adequate enablement for using the various disocyanate starting reactants to yield the specified mixture, having all of the claimed species. Again, applicants' attention is directed to paragraph 5 of this Office action.

13. Given the severity of the 35 USC 112 issues, the position is taken that a meaningful and productive prior art search and prior art analysis of the claims is not possible with respect to the claims, as drafted.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (703) 308-2982.

RABON SERGENT PRIMARY EXAMINER

R. Sergent/om February 10, 2001